Application No. 09/470,163
Amendment dated November 7, 2005
Response to Office Action of June 6, 2005

Atty. Docket No. 042390.P7777
Examiner Quang Nguyen
TC/A.U. 2141

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) A computer system comprising:

a forwarding element to perform data forwarding in a computer network, the forwarding element configurable with a device-specific instruction set;

a control element to perform network signaling and control in the computer network, the control element outputting non-device-specific instructions to configure the forwarding element;

an interconnecting element operatively connecting the forwarding element to the control element; and

a forwarding element plugin integrated with the control element to conceal from the control element a configuration interface of the forwarding element by ~~receive~~ receiving the non-device-specific instructions from the control element, translating the non-device-specific instructions into the device-specific instruction set of the forwarding element, and transmitting the device-specific instructions to the forwarding element, wherein the forwarding element utilizes the device-specific instructions to configure the forwarding element for performing data forwarding in the computer network.

2.   (Previously Presented) The computer system according to claim 1, further including an opaque forwarding element plugin for receiving the non-device-specific instructions from the control element and transmitting the non-device-specific instructions to the forwarding element plugin, and for receiving the translated, device-specific instructions from the forwarding element plugin and transmitting the device-specific instructions to the forwarding element.

3.   (Previously Presented) The computer system according to claim 1, wherein the device-specific instructions are transmitted in the form of a binary large object.

4.   (Previously Presented) The computer system according to claim 1, wherein the forwarding element further includes a decapsulator that receives the device-specific instructions and decapsulates them into data readable by a device-specific forwarding element interface of the forwarding element to configure the forwarding element.

5.   (Previously Presented) The computer system according to claim 1, wherein the device-specific instructions are transmitted to a decapsulator in the forwarding element for decapsulating the device-specific instructions.

6.   (Previously Presented) The computer system according to claim 1, wherein the device-specific instructions are encrypted before transmission to the forwarding element, and the encrypted device-specific instructions are decrypted at the forwarding element.

7.   (Original) The computer system according to claim 1, wherein the forwarding element plugin is a dynamic link library.

8.   (Currently Amended) A method for configuring a computer device, the method comprising:

generating non-device-specific instructions by a control element that performs network signaling and control functions for configuring a forwarding element that performs network packet forwarding functions;

transmitting the non-device-specific instructions from the control element to a forwarding element plugin integrated with the control element, the forwarding element

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plugin to conceal from the control element a configuration interface of the forwarding element;

translating the non-device-specific instructions into device-specific instructions specialized for the forwarding element; and

transmitting the device-specific instructions to the forwarding element for configuring the forwarding element.

9.   (Original) The method according to claim 8, wherein the forwarding element is adapted to perform data forwarding in a computer network.

10.   (Original) The method according to claim 8, wherein the control element is adapted to perform network signaling ad control in a computer network.

11.   (Previously Presented) The method according to claim 8, further including:

receiving the non-device-specific instructions, by an opaque forwarding element plugin, from the control element; and

transmitting the non-device-specific instructions, by the opaque forwarding element plugin, to the forwarding element plugin.

12.   (Previously Presented) The method according to claim 8, further including:

receiving the device-specific instructions, by an opaque forwarding element plugin, from the forwarding element plugin; and

transmitting the device-specific instructions, by the opaque forwarding element plugin, to the forwarding element.

13.   (Previously Presented) The method according to claim 8, further including:

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decapsulating the device-specific instructions into data readable by a device-specific forwarding element interface of the forwarding element for configuring the forwarding element.

14. (Previously Presented) The method according to claim 8, wherein the device-specific instructions are sent in the form of a binary large object.

15. (Previously Presented) The method according to claim 8, further including:

encrypting the device-specific instructions before transmitting them to the forwarding element; and

decrypting the device-specific instructions at the forwarding element.

16. (Original) The method according to claim 8, wherein the forwarding element plugin is a dynamic link library.

17. (Currently Amended) An article comprising a machine-readable medium storing instruction that, when executed by a processor, the instructions perform,

concealing from a control element a configuration interface of a forwarding element by:

receiving non-device specific instructions, generated by a control element, for configuring a forwarding element;

translating the non-device-specific instructions into device-specific instructions specialized for the forwarding element; and

transmitting the device-specific instructions to the forwarding element for configuring the forwarding element.

18. (Previously Presented) The article according to claim 17, wherein the instructions further perform:

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receiving the non-device-specific instructions from an opaque forwarding element plugin; and

transmitting the device-specific instructions to the opaque forwarding element plugin.

19.   (Previously Presented) The article according to claim 17, wherein the instructions further perform:

encrypting the device-specific instructions before transmission to the forwarding element.

20.   (Previously Presented) The article according to claim 17, wherein the device-specific instructions are transmitted in the form of a binary large object.

21.   (Previously Presented) The article according to claim 17, wherein the machine-readable medium includes a dynamic link library.

22.   (New) The computer system of claim 1, wherein the forwarding element is remotely located from the control element.

23.   (New) The computer system of claim 1, wherein the device-specific instruction set is indicative of the design or hardware implementation of the forwarding element.